

Remarks

Claims 1-20 are pending in the present Application. Claims 1, 2 and 9-15 are amended above to better clarify the claimed invention and to correct informalities.

The specification is amended above to correct informalities.

No new matter is introduced herein.

Specification Objections

The Examiner has objected to the specification as lacking proper section headings and a brief description of the drawings. Applicant respectfully submits that the amendments to the specification set forth above overcome any such grounds for objection.

Claim Objections

Claims 2 and 7 were objected to for recitation of “the data” without sufficient antecedent basis. Applicant respectfully submits that the amendments to the claims set forth above overcome any such grounds for objection.

Claim Rejections – 35 USC § 112

Claims 1-20 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the enablement requirement. The Examiner contends that the claims contain “subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.” More specifically, with respect to independent claims 1 and 9, the Examiner contends that “the specification does not described how to determine ‘a search depth’ to match ‘speed of the reading-in of disk sectors such that the reading-in of disk sectors is not interrupted’, in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention without undue experimentation.” (Office Action, pages 3-4.)

Applicant respectfully disagrees. The specification clearly states that the first search step is executed such that it does not over task the processor. (See, e.g., page 5, lines 15-17.) Furthermore, process prioritization, in which the second search process is

executed with lower priority than the first search process, is also described. (See, e.g., page 6, lines 13-16.) A person of ordinary skill in the relevant art understands from this disclosure that some kind of task management is to be applied. If the searching task of the first search step has not been completed before new data is read-in, the reading-in task will need to be interrupted to allow the searching task to complete. (See, e.g., page 2, lines 20-26.) As can be appreciated, whether the searching task is completed will depend on the amount of time available to complete the search and the time needed to complete the search. The time available to complete the search will depend on the speed of the reading-in task and the time needed to complete the search will depend on the depth of the search. As such, in order to avoid interrupting the reading-in task, the search depth should be matched to the reading-in speed, as claimed.

Moreover, as can be appreciated, the precise determination of the optimal search depth will vary based on factors such as processing power, the size of records to be read-in, other tasks that the processor may be executing, and other implementation-specific considerations, among others. With the benefit of the present application, such determinations are well within the abilities of a person of ordinary skill in the art.

As such, the matching of search depth to reading speed emerges from task management to which a person of ordinary skill in the art is directed by the present disclosure and which is within their common knowledge to implement.

For the foregoing reasons, therefore, Applicant respectfully asserts that the rejection of claims 1-20 under 35 U.S.C. § 112, first paragraph, should be withdrawn.

Claim Rejections – 35 USC § 102

Claims 1-20 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2004/0117037 to Hinshaw et al. (hereinafter “Hinshaw”). For the reasons stated below, Applicant respectfully submits that this rejection does not apply to the claims as amended herein.

Hinshaw describes an asymmetric streaming record data processing method and apparatus with host computers and job processing units (JPU) coupled together as nodes on a network. (See, e.g., Abstract). As described in Hinshaw, each JPU comprises a memory, a central processing unit (CPU) and a programmable streaming

data processor (PSDP) specifically adapted for processing record-oriented data by filtering. (See, e.g., Fig. 2 and ¶[0336]). The PSDP functions as a disk controller and as a coprocessor or hardware accelerator for the JPU. (See, ¶[0333]). During disk read operations, the PSDP filters the data it is reading, whereby less data ends up in the JPU's memory, leaving the CPU free for more complex tasks such as sorting. (See, ¶[0341]). As such, each of Hinshaw's JPUs has two processors: the PSDP and the CPU.

Independent claims 1 and 9 have been amended above to make clear that the same processor is used in executing both the first and the second search steps, wherein the second search step uses computational power of the processor which is remaining from the first search step, as disclosed in the specification at page 6, lines 13-16, and page 7, lines 19-21.

By contrast, Hinshaw attempts to avoid interference of complex search tasks with disk read operations by providing separate and independent processing units for complex search and read-in. As such, Hinshaw teaches away from the claimed invention which solves this problem by using task management and prioritization of the search and reading-in tasks so as to allow the use of a single processor. Moreover, Hinshaw does not mention task management or prioritization.

For the aforementioned reasons, therefore, Applicant respectfully asserts that independent claims 1 and 9 are not anticipated by Hinshaw. As such, claims 2-8 and 10-20, which depend therefrom and recite additional limitations, are likewise not anticipated by Hinshaw, for at least the reasons stated above. The rejection of claims 1-20 under 35 U.S.C. § 102(e) should therefore be withdrawn.

Conclusion

In view of the amendments and remarks presented herein, Applicant respectfully asserts that all pending claims, claims 1-20, are in condition for allowance. Prompt consideration and advancement of the present application to allowance are earnestly solicited.

No fee is believed to have been incurred by virtue of this amendment. However if a fee is incurred on the basis of this amendment, please charge such fee against deposit account 07-0832.

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